



孕龍科技股份有限公司
ZeroPlus Technology Co., Ltd.

SPECIFICATION

MODEL: 019-LAP-STBus-M

PART NO : _____

VERSION : V1.05

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
ZeroPlus Technology after
signing.

2F, NO.123, Jian Ba Rd,
Chung Ho City, Taipei Hsian, R.O.C.

Tel:+886-2-66202225
Fax:+886-2-22234362



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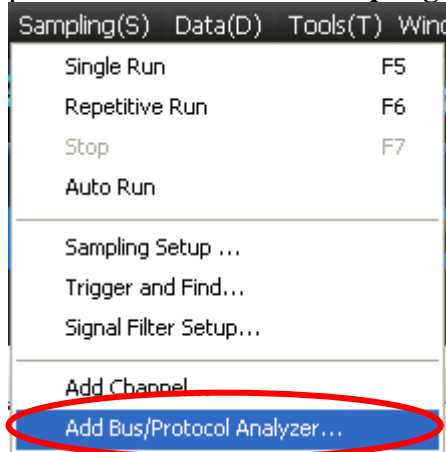
1 Software Register

Please register the software as the following steps:

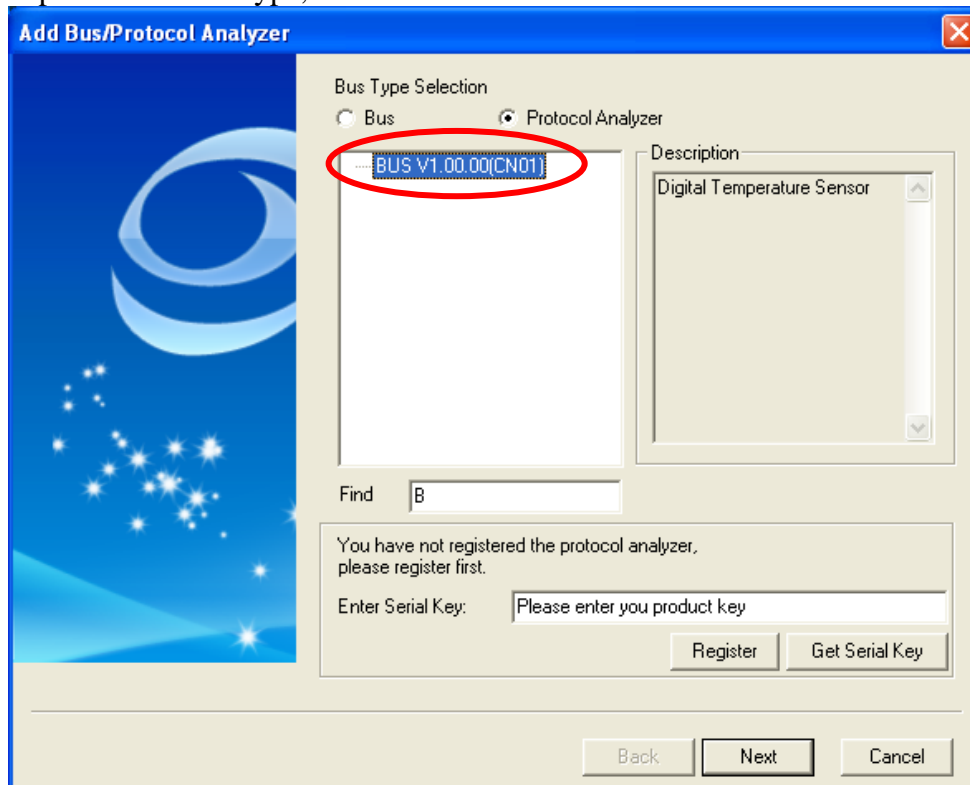
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ Remark2: We won't have additional notice for you, when there is any modification of the module specification. If there is some unconformity caused by the module version upgrade, users should take the module software as the standard.

STEP 1. Open the Logic Analyzer and select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.

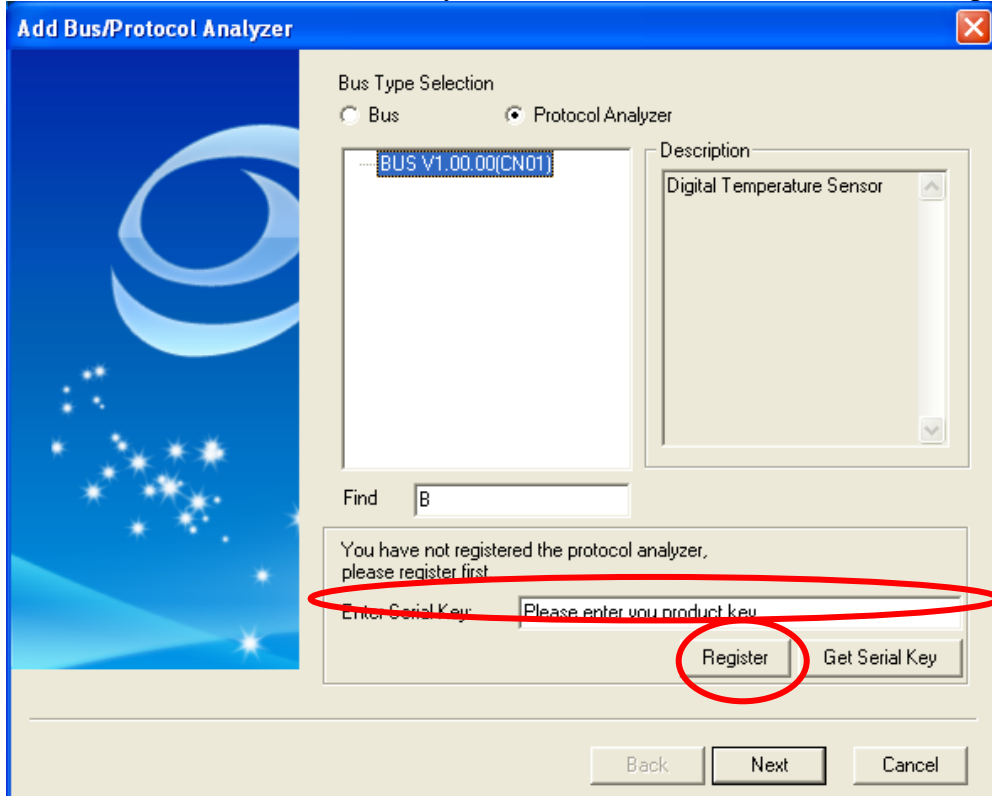


STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, select the BUS.

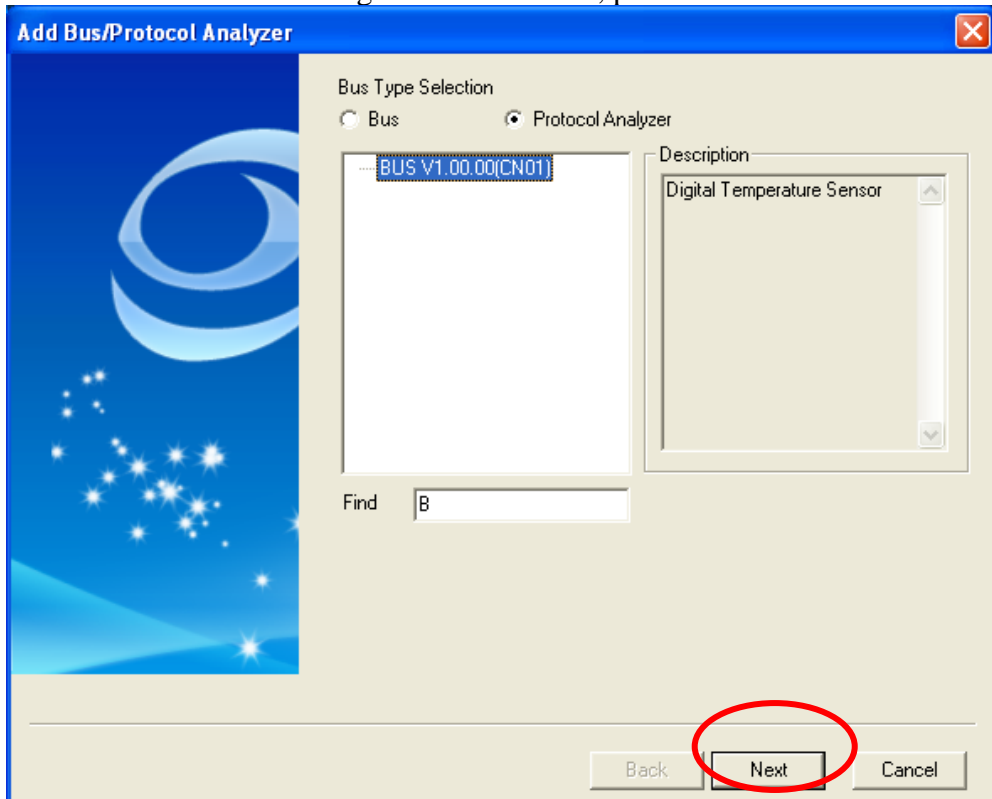




STEP 3. Enter the Serial Key of the BUS under this Model, and then press the **Register**.



STEP 4. After the Register is successful, press the **Next**.





2 User Interface

Please refer to the below images to select options of setting **STBus Module**.

Pin Assignment:

FR: The synchronous signal channel is used to determine the starting and ending positions of the packet. Its default is A0.

STBus: STBus signal line can decode the Protocol Analyzer STBus and be compatible with the Protocol Analyzer GCI Decoding. The default is A1.

CLK: CLK is the frequency signal line. The default is A2.

Protocol Analyzer Property:

Synchronous Level: The options are FR Low Level and FR High Level. The default is FR Low Level.

Sampling Mode: **Falling** and **Rising** are listed on the pull-down menu. The default is **Falling**.

Frame Length: The default is unselected. When the option is selected, the frame length is limited, when the frame length is set as 512 Bit, every packet length is 512 Bits only. The exceed and less frame length will not be decoded. The data is displayed with 8 bits as a group.

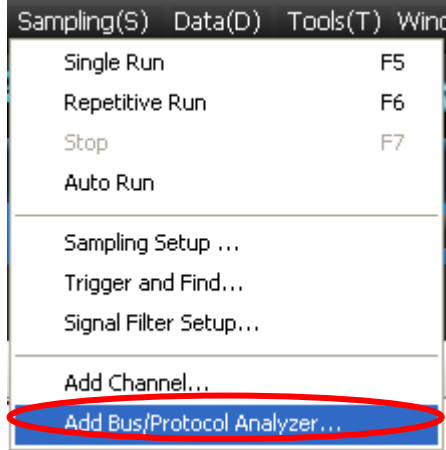
Protocol Analyzer Format:

Users can set the colors as their requirements. The Item (Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of this Item (Data) in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default Data Format is controlled by the main program and the Data Format of this item (Data) is the Default.

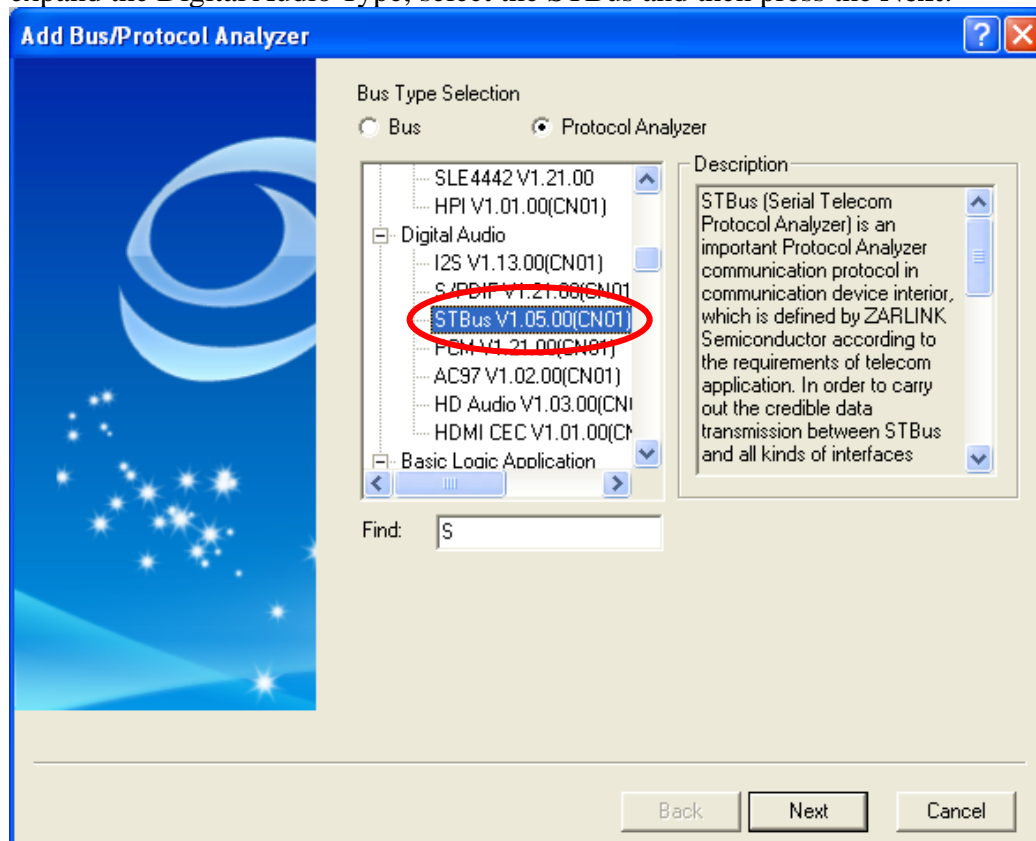


3 Operating Instructions

STEP 1. Select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Digital Audio Type, select the STBus and then press the **Next**.





STEP 3. Set the Pin Assignment.

PROTOCOL ANALYZER STBus

Pin Assignment

FR: A0

STBus: A1

CLK: A2

Protocol Analyzer Property

Synchronous Level: FR Low Level

Sampling Mode: Falling

☐ Frame Length: 512 Bit
(Min:8,Max:2048)

Protocol Analyzer Format

Item	Color	Data Format
Data		Default

Default Back Next Cancel

STEP 4. Set the Synchronous Level to FR Low Level or FR High Level.

PROTOCOL ANALYZER STBus

Pin Assignment

FR: A0

STBus: A1

CLK: A2

Protocol Analyzer Property

Synchronous Level: FR Low Level

Sampling Mode: Falling

☐ Frame Length: 512 Bit
(Min:8,Max:2048)

Protocol Analyzer Format

Item	Color	Data Format
Data		Default

Default Back Next Cancel



STEP 5. Set the Sampling Mode to Falling or Rising.

The screenshot shows the 'PROTOCOL ANALYZER STBus' window. The 'Pin Assignment' section has FR: A0, STBus: A1, and CLK: A2. The 'Protocol Analyzer Property' section has Synchronous Level: FR Low Level and Sampling Mode: Falling (highlighted with a red oval). The 'Protocol Analyzer Format' section has Data Format: Default. The bottom buttons are Default, Back, Next, and Cancel.

STEP 6. Set the Frame Length in the range from 8 to 2048.

The screenshot shows the 'PROTOCOL ANALYZER STBus' window. The 'Pin Assignment' section has FR: A0, STBus: A1, and CLK: A2. The 'Protocol Analyzer Property' section has Synchronous Level: FR Low Level and Sampling Mode: Falling. The 'Frame Length' is set to 512 (highlighted with a red oval). The 'Protocol Analyzer Format' section has Data Format: Default. The bottom buttons are Default, Back, Next, and Cancel.



STEP 7. Set the Protocol Analyzer Format.

PROTOCOL ANALYZER STBus

Pin Assignment

FR: A0

STBus: A1

CLK: A2

Protocol Analyzer Property

Synchronous Level: FR Low Level

Sampling Mode: Falling

☐ Frame Length: 512 Bit
(Min:8,Max:2048)

Protocol Analyzer Format

Item	Color	Data Format
Data		Default

Default Back Next Cancel

STEP 8. Press the **Next** to finish all settings.

PROTOCOL ANALYZER STBus

Pin Assignment

FR: A0

STBus: A1

CLK: A2

Protocol Analyzer Property

Synchronous Level: FR Low Level

Sampling Mode: Falling

☐ Frame Length: 512 Bit
(Min:8,Max:2048)

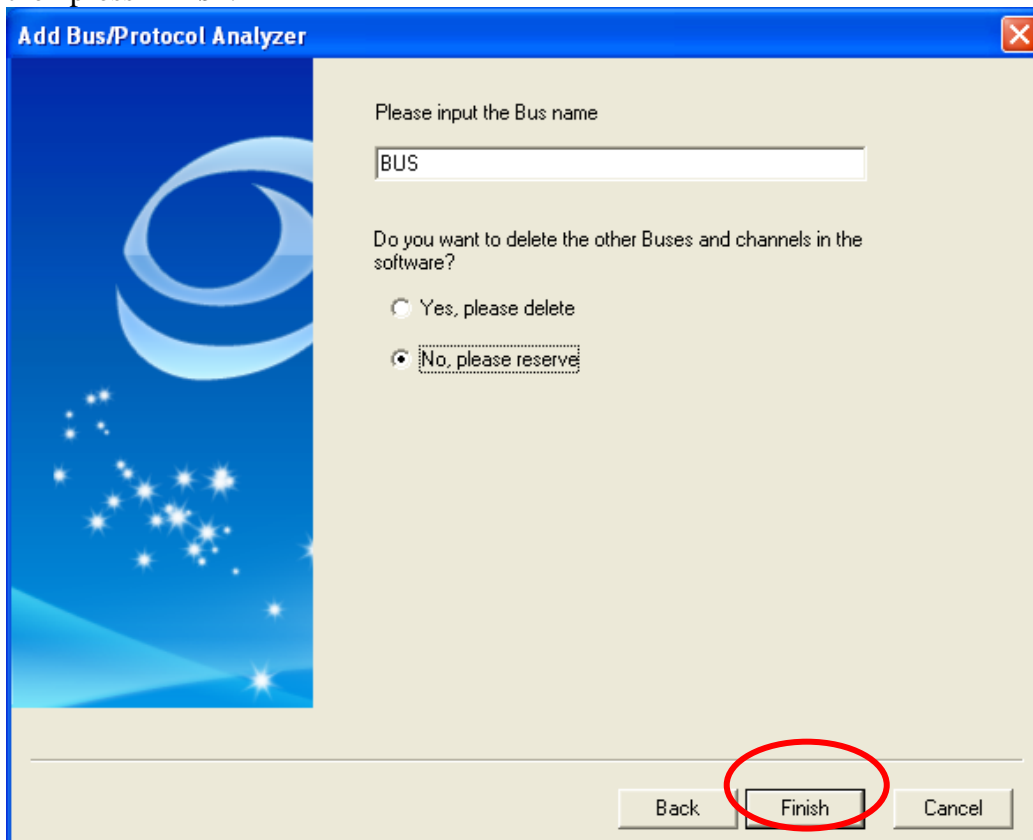
Protocol Analyzer Format

Item	Color	Data Format
Data		Default

Default Back Next Cancel

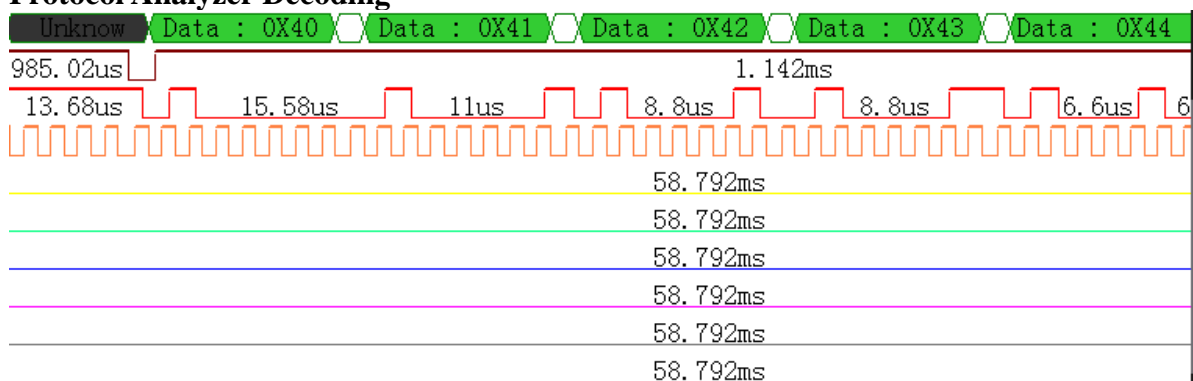


STEP 9. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 10. Following pictures show the completion of the protocol analyzer decoding and the packet list. The trigger condition is set as Rising Edge; the memory depth is 128K; the sampling frequency is 50MHz (the sampling frequency should be more than eight times higher than the signal to be tested).

Protocol Analyzer Decoding





Packet List

Navigator Packet List Statistics Memory Analyzer			
Packet #	Name	TimeStamp	Data
1	Bus1(STBus)	0.98672ms	64BYTES
Packet #	Name	TimeStamp	Data
2	Bus1(STBus)	2.14882ms	64BYTES
Packet #	Name	TimeStamp	Data
3	Bus1(STBus)	3.29132ms	64BYTES
Packet #	Name	TimeStamp	Data
4	Bus1(STBus)	4.45342ms	64BYTES
Packet #	Name	TimeStamp	Data
5	Bus1(STBus)	5.59592ms	64BYTES